

urgency-based schedule. We agree with Beanlands and colleagues that this could reduce some of the benefits of revascularization when revascularization is delayed (2), but the urgency-based schedule illustrates the clinical reality in an HMO-oriented health care system.

We fully agree with Beanlands and colleagues that larger randomized, controlled clinical trials are needed, and we are pleased to hear that some are underway. In our opinion these studies should address the role of various viability techniques (PET, SPECT, echocardiography, magnetic resonance imaging) in different patient populations (mild, moderate, severe LV dysfunction) and their cost-effectiveness. Preferably, these studies should be conducted in a blinded fashion to prevent selection biases, as we have demonstrated (1). Moreover, we believe these studies should focus on patient management and clinical outcome, because that is what is most important to patients in the everyday clinical practice (3).

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## Periodontal Disease and Risk of Myocardial Infarction

As interesting and impressive as "Periodontal Disease and Risk of Subsequent Cardiovascular Disease in U.S. Male Physicians" (1) may be with its study of 22,037 participants, its conclusions are likely to mislead readers and block further essential research on that relationship. The conclusion, excluding a relationship, is in

direct conflict with the report of Deliargyris et al. (2) presented at the annual meeting of the American Heart Association last November as well as with my own report in *Dentistry Today* (3). These latter two reports, contrariwise, "indicate that acute myocardial infarction (AMI) patients are more likely to have periodontal disease than a comparable control population without coronary artery disease."

Hardly recognized by the patient but easily identified by the periodontist, gingivitis with >4-mm pockets (the criteria of Deliargyris et al. (2) for periodontal disease predictive of acute myocardial infarction) would have been largely overlooked by the Howell et al. group (1). It seems almost certain, therefore, that the Howell et al. (1) group of self-reported periodontal disease fails to include many, if not most, cases with gingivitis with >4-mm pockets, which the Deliargyris et al. (2) group found to be predictive of AMI. This makes the sample unreliable for statistical decision making; but even excluding this error, the Howell et al. (1) group reported a "small (10% to 20%), and statistically nonsignificant increased risk for nonfatal myocardial infarction, nonfatal stroke and cardiovascular death" among the group that self-reported periodontal disease.

Although controversy on this matter continues, further investigation remains appropriate. During this time, the patient's health is likely to benefit; and both physicians and dentists are likely to benefit, professionally, with continued cooperation in further studies.

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## REPLY

Dr. Wehrmacher expresses concern that reliance on participant self-reports of periodontal disease in our analysis of periodontal disease and subsequent cardiovascular disease in the Physicians' Health Study (1) probably resulted in the failure to include some cases of periodontal disease. We agree that some cases of periodontal disease may have been missed. However, as discussed in the study, the magnitude of any such misclassification (which is likely to have been random with respect to subsequent cardiovascular disease) is unlikely to have caused us to miss a two- to threefold increased risk of cardiovascular disease reported in earlier studies. Furthermore, as also discussed in the study, associations were noted between reported periodontal disease and age and cigarette smoking, two acknowledged risk factors for periodontal disease, providing support for the validity of this measure in our